

CLAIMS

1. A system at a central location for interactively establishing communication links between a <sup>subscriber</sup> calling party and one or more parties called by said <sup>subscriber</sup> calling party using input and output connections to a telephone exchange interconnecting the <sup>subscriber</sup> calling party with the central location wherein a signal containing data uniquely identifying the <sup>subscriber</sup> originating station of the calling party is placed on the input connection whenever the calling party places a call to said input connection from said <sup>subscriber</sup> station comprising:
- means storing the unique identifying data of the <sup>subscriber</sup> calling party,
- means responsive to a signal on said input connection indicating an attempt to establish communications between the exchange and the central location for comparing the data of the identifying signal associated with the connection attempt with the contents of said storing means,
- means operable in response to a favorable comparison between said <sup>signal containing</sup> input data and said stored data for originating a call from said central location to said <sup>subscriber</sup> calling party station,
- means responsive to signals received from said <sup>subscriber</sup> calling party station for establishing a communication connection with a <sup>called</sup> third party station identified by said received signals, and
- means for bridging a communication connection between said <sup>subscriber</sup> calling party station and said <sup>called</sup> third party station.

2. A system in accordance with claim 1 which includes means operable after a predetermined period of time from commencement of an attempt to establish a connection from said <sup>subscriber</sup> ~~calling party~~ station for terminating said connection attempt.

3. A system in accordance with claim 2 wherein said connection attempt terminating means includes means for temporarily establishing a communication connection with said <sup>subscriber</sup> ~~calling party~~ station for presenting an audio message thereto, and means for disconnecting said central location and said calling station after completion of said audio message.

4. A system in accordance with claim 1 wherein said means operable in response to a favorable comparison includes means for returning an audible signal to the <sup>subscriber</sup> ~~calling party~~ indicative of said favorable comparison, whereby the <sup>subscriber</sup> ~~calling party~~ terminates the call attempt for allowing said central location to originate a call thereto.

5. A system in accordance with claim 4 wherein the <sup>subscriber</sup> ~~calling party~~ identifying data is the direct inward dial number produced by the exchange, said storing means containing the direct inward dial number for each <sup>subscriber</sup> ~~calling party~~ authorized to utilize said system, and said favorable comparison responsive means obtains the direct inward dial number from said storing means upon occurrence of said favorable comparison for placing said number on a said output connection to said exchange.

6. A system in accordance with claim 1 which includes means for receiving information on calls established by the system for enabling a determination of the extent of use of said system by said <sup>subscribers</sup> ~~calling parties~~.

7. A system in accordance with claim 1 which includes means responsive to failure of the called party to answer the call attempt for providing an indication to the <sup>subscriber</sup> ~~calling party~~ that they can select between terminating connection attempts and attempting to establish a connection with another third party.

8. A system in accordance with claim 1 which includes means operable after establishing a communication connection with the <sup>subscriber</sup> ~~calling party~~ station for responding to a special signal originated from the <sup>subscriber</sup> ~~calling party~~ station so as to terminate further communications and communication attempts with said <sup>subscriber</sup> ~~calling party~~ station.

9. A system in accordance with claim 8 wherein said special signal responding means includes means for recognizing a dual tone multi-frequency signal from said <sup>subscriber</sup> ~~calling party~~ station.

10. A method for interactively controlling communication links between a <sup>subscriber</sup> ~~calling party~~ and one or more parties called by said <sup>subscriber</sup> ~~calling party~~ through a telephone exchange wherein a signal containing data uniquely identifying the <sup>subscriber</sup> ~~originating station of the calling party~~ is transmitted by said exchange whenever said <sup>subscriber</sup> ~~originating station~~ places a call into said exchange comprising the steps of

establishing telephone line input and output connections from a central location to said telephone exchange,

storing the unique identifying data of the <sup>subscriber</sup> ~~calling party~~ at said central location,

comparing the data of the identifying signal associated with a connection attempt with the said stored data in response to a signal on a said input connection attempting to establish communications between said exchange and said central location,

responding to a favorable comparison between said input data and said stored data for originating a call from said central location to said <sup>subscriber</sup> ~~calling party~~ station,

receiving signals from said <sup>subscriber</sup> ~~calling party~~ station for establishing a communication connection with a <sup>called</sup> ~~third~~ party station identified by said received signals, and

bridging a communication connection between said <sup>subscriber</sup> ~~calling party~~ station and said <sup>called</sup> ~~third~~ party station.

11. The method in accordance with claim 10 which includes the step of completing a connection to the said input line for placing an audio message thereon whenever said comparison step fails to produce a favorable result.

12. The method in accordance with claim 11 which includes the step of enabling said connection completing and audio message placing step whenever the <sup>subscriber</sup> ~~calling party~~ fails to terminate the call attempt after passage of a predetermined period of time.

13. The method in accordance with claim 10 wherein each <sup>subscriber</sup> ~~calling party~~ station has a unique direct inward dial number assigned thereto and said exchange produces said direct inward dial number in conjunction with attempts to establish a connection with said central location, said storing step including the step of storing a plurality of direct inward dial numbers each representing an authorized subscriber of said central location, said step of originating a call to said <sup>subscriber</sup> ~~calling party~~ including the step of retrieving the stored said direct inward dial number assigned to that <sup>subscriber</sup> ~~calling party~~.

14. A method providing economical telephone service by employing the most advantageous tariff between an originator and one or more called parties, comprising the steps of

5 providing a service center at which a call-back telephone number is provided for each originator and at which a number is assigned for use for all calls that are placed by that originator,

10 using the assigned number to call the service center whereupon the originator is identified by the service center,

15 sending a signal from the service center to the originator thus indicating that the originator is identified whereupon the originator is instructed to terminate the call,

20 sensing originator call attempt termination at the service center and responding thereto by seizing a first outbound circuit over which the service center outputs the call-back number for the identified originator thereby reconnecting the service center to the originator,

prompting the originator to input the telephone number of the called party the originator intends to call,

25 seizing a second outbound circuit at the service center whereupon the called party number is outputted to the second outbound circuit, and

30 bridging the originator to the second outbound circuit thus connecting the originator with the called party.

15. The method in accordance with claim 14 which includes the step of connecting the outbound connections of said service center with a telephone exchange having an economical tariff rate.

16. The method in accordance with claim 15 which includes the step of determining that the originator has failed to terminate the call attempt a predetermined time after said prompting step.

5 17. The method in accordance with claim 16 which includes the step of responding to a failure to determine that the originator is authorized to establish communications by completing the connection to the originator input line to the central location and presenting an audio message on said line announcing to the originator that the call placement is not authorized.

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